REMARKS

After the foregoing amendment, claims 1-4, 6-11 and 19 are active in the present application. The drawings and the specification have been amended. Claims 5 and 12 have been cancelled, claims 3, 6 and 10 have been amended, and new claim 19 is presented. No new matter has been added by the amendment and the amendment is believed to place the application in condition for allowance. Accordingly, reconsideration and allowance of the application, as amended, are respectfully requested.

The drawings were objected to under 37 CFR 1.83(a) for failing to show every feature of the invention. The Office Action states that "a **leadframe** to which **bonding pads** of the **integrated circuit device** are **electrically connected**" in claims 3 and 10, "**an encapsulant surrounding the base carrier, the integrated circuit die and at least a portion of the leadframe**" in claims 4 and 11, and "the device is **an exposed pad type package device**" in claims 5 and 12" must be shown in the drawings or canceled from the claims (emphasis in original).

Claims 5 and 12 have been cancelled because an EP package is not shown in the drawings. However, applicants do not mean to disclaim the use of the present invention with such package types and believe that the use of the invention in such package types is covered at least by independent claim 1. Claims 3 and 10 have been amended to recite that a semiconductor device, "further comprising a leadframe electrically connected to the integrated circuit die. Thus, these claims no longer refer to bonding pads, which were not specifically shown in the drawings. As for the leadframe, electrical connection thereto, and encapsulant, Applicants propose adding new

FIG. 8, which is an enlarged cross-sectional view of a TSOP, similar to the TSOP shown in FIG. 1 except that the TSOP incorporates the present invention, namely the extended adhesive material layer. The specification has been updated at new paragraphs [0015.1] and [0032.1] to describe the new drawing figure. As the prior art TSOP was shown in FIG. 1 and the invention, as shown in FIG. 5, and FIG. 8 is showing a combination thereof, and an example using a leadframe is discussed in paragraph [0029], no new matter is being added to the application. Since new FIG. 8 shows the claimed features of claims 3-4 and 10-11, the drawings are now in full compliance with 37 CFR 1.83(a).

Upon approval of the proposed amendment and allowance of the application, Applicants will file formal drawings incorporating the proposed amendment in accordance with U.S. Patent and Trademark Office procedures. In view of the proposed amendment to the drawings, Applicants respectfully request that the objection to the drawings be withdrawn.

Claims 1-5 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,037,677 (Kikuchi et al.). The Office Action makes note of FIGS. 8 and 9. Applicants respectfully traverse the rejection.

The present invention provides a semiconductor device having an extended adhesive material layer for attaching an IC die to a base carrier. According to the present invention, extended adhesive material means that the adhesive material extends beyond the edges of the die and such extension is greater than or equal to two times the thickness of the die. See Specification, paragraph [0025]. The Applicants have found that providing such extended

adhesive material layer decreases delamination defects.

Kikuchi et al. disclose an IC card, which in one embodiment (the fourth embodiment shown in FIGS. 8 and 9 noted in the Office Action) comprises an IC element 12 mounted to a support section 11B of thin metal plates 11. The IC is attached to the support section with adhesion 13. (Kikuchi et al. col. 7, lines 27-29. The IC is electrically connected via wires 14 to external connecting terminal portions 11A. FIG. 8, which is a plan view, shows the adhesion 13 extending beyond the edges of the IC 12. FIG. 9, which is a cross-sectional view, shows the thickness of the adhesion 13 relative to the IC 12. As shown, the adhesion appears to extend a distance beyond the edge of the IC by only about one-third of the thickness of the IC.

In contrast, the present invention provides an extended adhesive material layer that extends beyond the edges of the die by greater than or equal to about two times the thickness of the die. As is well known, a patent attorney is allowed to be his own lexicographer, defining terms in used in the specification and claims to have particular meaning, so long as such meaning is not repugnant to its usual meaning. Lear Siegler, Inc. v. Aerogrip Corp., 221 U.S.P.Q. 1025, 1031 (Fed. Cir. 1984).

Since independent claim 1 includes "an extended adhesive material layer," it is submitted that claim 1 is different from the device disclosed by Kikuchi et al. Moreover, Kikuchi et al. is silent as to the need to provide such an extended adhesive material layer and thus does not teach or suggest providing same. Since the present invention, as recited in independent claim 1, includes an extended adhesive material layer, and since Kikuchi et al. does not

disclose or suggest such element, claim 1, as well as dependent claims 2-4 are not anticipated by Kikuchi et al. Accordingly, Applicants respectfully request that such rejection under §102(b) be withdrawn.

Claims 6-12 have been rejected under 35 U.S.C. §103 as being unpatentable over Kikuchi et al. in view of U.S. Patent Application No. 2002/0182774 (Heckman). The Office Action states that Kikuchi et al. disclose all of the limitations of the claimed invention except for pattern shaping the adhesive material, but this aspect is taught by Heckman. Applicants respectfully traverse the rejection.

As previously discussed, the present invention is directed to attaching a die to a base carrier with an extended adhesive material layer, and that Kikuchi et al. does not disclose such an extended layer. Heckman is directed to a die attach method that uses various "+" shaped epoxy patterns. However, Heckman does not teach or suggest extending the epoxy material beyond the edges of the die to the extent taught and claimed in the present invention. Accordingly, reconsideration and withdrawal of the rejection of claims 6-11 is requested.

Finally, new claim 19 is presented. New claim 19 is in Jepson format and clearly highlights the difference between the present invention and the prior art.

In view of the foregoing amendment and remarks, it is respectfully submitted that the present application, including claims 1-4, 6-11 and 19, is in condition for allowance and such action is respectfully solicited.

Respectfully submitted,

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